

CLAIMS

1. A process for producing a multilayer for a multilayer electronic device, comprising a dielectric layer of a ceramic green sheet, an adhesive layer, an electrode layer with a predetermined pattern and a spacer layer with a complementary pattern of the predetermined pattern, which electrode layer and spacer layer are laminated on an upper surface of the dielectric layer through the adhesive layer, using (I) an electrode layer-forming roll (1) obtained by winding up an electrode sheet (10) having a layer structure comprising a first substrate sheet (11) and an electrode-spacer layer (14) into a roll shape; (II) an adhesive layer-forming roll (2) obtained by winding up an adhesive layer-forming sheet (20) having a layer structure comprising a back transfer (offset)-preventing layer (21), a second substrate sheet (22) and the adhesive layer (24) into a roll shape; and (III) a green sheet roll (3) obtained by winding up the ceramic green sheet (30) having a layer structure comprising a third substrate sheet (31) and the dielectric layer (33) into a roll shape, said process comprising:

(A) a first step of transferring only the adhesive layer (24) of the adhesive layer-forming sheet (20) wound off from the adhesive layer-forming roll (2) onto an upper surface of the electrode-spacer layer (14) of the electrode sheet (10), while winding off the electrode sheet (10) from

the electrode layer-forming roll (1);

(B) a second step of transferring only the dielectric layer (33) of the ceramic green sheet (30) wound off from the green sheet roll (3) onto the adhesive layer (24) transferred onto the upper surface of the electrode sheet (10) delivered from the first transfer step;

(C) a third step of bonding the adhesive layer-forming sheet (20) wound off from the adhesive layer-forming roll (2) onto the dielectric layer (33) transferred onto the upper surface of the electrode sheet (10) delivered from the second transfer step, through the adhesive layer (24) of the adhesive layer-forming sheet (20), thereby forming a multilayer sheet (40); and

(D) a fourth step of winding up the multilayer sheet (40) delivered from the third step, thereby producing a multilayer sheet roll (4).

2. A process for producing a multilayer for a multilayer electronic device, comprising a dielectric layer of a ceramic green sheet, an adhesive layer, an electrode layer with a predetermined pattern and a spacer layer with a complementary pattern of the predetermined pattern, which electrode layer and spacer layer are laminated on an upper surface of the dielectric layer through the adhesive layer, using (I) a green sheet roll (3) obtained by winding up the

ceramic green sheet (30) having a layer structure comprising a third substrate sheet (31) and the dielectric layer (33) into a roll shape; (II) an adhesive layer-forming roll (2) obtained by winding up an adhesive layer-forming sheet (20) having a layer structure comprising a back transfer (offset)-preventing layer (21), a second substrate sheet (22) and the adhesive layer (24) into a roll shape; and (III) an electrode layer-forming roll (1) obtained by winding up an electrode sheet (10) having a layer structure comprising a first substrate sheet (11) and an electrode-spacer layer (14) into a roll shape, said process comprising:

(A) a first step of transferring only the adhesive layer (24) of the adhesive layer-forming sheet (20) wound off from the adhesive layer-forming roll (2) onto an upper surface of the dielectric layer (33) of the ceramic green sheet (30), while winding off the ceramic green sheet (30) from the green sheet roll (3);

(B) a second step of transferring only the electrode-spacer layer (14) of the electrode sheet (10) wound off from the electrode layer-forming roll (1) onto the adhesive layer (24) transferred onto an upper surface of the ceramic green sheet (30) delivered from the first transfer step;

(C) a third step of bonding the adhesive layer-forming sheet (20) wound off from the adhesive layer-forming roll

(2) onto the electrode-spacer layer (14) transferred onto the upper surface of the ceramic green sheet (30) delivered from the second transfer step, through the adhesive layer (24) of the adhesive layer-forming sheet (20), thereby forming a multilayer sheet (40); and

(D) a fourth step of winding up the multilayer sheet (40) delivered from the third step, thereby producing a multilayer sheet roll (4).

3. A process according to claim 1 or 2, wherein the electrode sheet (10) has a layer structure comprising the first substrate sheet (11), a release layer (12) and the electrode-spacer layer (14).

4. A process according to any one of claims 1 to 3, wherein the electrode sheet (10) has a layer structure comprising the first substrate sheet (11), the release layer (12), a print-assisting layer (13) and the electrode-spacer layer (14).

5. A process according to any one of claims 1 to 4, wherein the adhesive layer-forming sheet (20) has a layer structure comprising the back transfer (offset)-preventing layer (21), the second substrate sheet (22), a release layer (23) and the adhesive layer (24).

6. A process according to any one of claims 1 to 5, wherein the ceramic green sheet (30) has a layer structure comprising the third substrate sheet (31), a release layer (32) and the dielectric layer (33).